

IAP13 Rec'd PCT/PTO 08 JAN 2007

PTO/SB/17 (07-06)

Approved for use through 01/31/2007. OMB 0651-0032

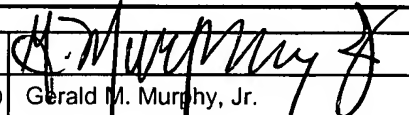
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no person are required to respond to a collection of information unless it displays a valid OMB control number.

Effective on 12/08/2004. Fees pursuant to the Consolidated Appropriations Act, 2005 (H.R. 4818). <b>FEE TRANSMITTAL</b> <b>For FY 2006</b>		<b>Complete if Known</b> Application Number 10/569,949-Conf. #3122 ✓ Filing Date February 28, 2006 First Named Inventor Takeshi IMANISHI Examiner Name Not Yet Assigned Art Unit N/A Attorney Docket No. 0230-0236PUS1	
<input checked="" type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27			
<b>TOTAL AMOUNT OF PAYMENT</b> (\$) 60.00			

<b>METHOD OF PAYMENT</b> (check all that apply)	
<input checked="" type="checkbox"/> Check <input type="checkbox"/> Credit Card <input type="checkbox"/> Money Order <input type="checkbox"/> None <input type="checkbox"/> Other (please identify): _____	
<input type="checkbox"/> Deposit Account    Deposit Account Number: 02-2448    Deposit Account Name: Birch, Stewart, Kolasch & Birch, LLP	
For the above-identified deposit account, the Director is hereby authorized to: (check all that apply)	
<input type="checkbox"/> Charge fee(s) indicated below <input type="checkbox"/> Charge fee(s) indicated below, except for the filing fee	
<input checked="" type="checkbox"/> Charge any additional fee(s) or underpayments of fee(s) under 37 CFR 1.16 and 1.17 <input checked="" type="checkbox"/> Credit any overpayments	

<b>FEE CALCULATION</b>							
<b>1. BASIC FILING, SEARCH, AND EXAMINATION FEES</b>							
	<b>FILING FEES</b> <u>Small Entity</u>		<b>SEARCH FEES</b> <u>Small Entity</u>		<b>EXAMINATION FEES</b> <u>Small Entity</u>		
<b>Application Type</b>	<b>Fee (\$)</b>	<b>Fee (\$)</b>	<b>Fee (\$)</b>	<b>Fee (\$)</b>	<b>Fee (\$)</b>	<b>Fee (\$)</b>	<b>Fees Paid (\$)</b>
Utility	300	150	500	250	200	100	
Design	200	100	100	50	130	65	
Plant	200	100	300	150	160	80	
Reissue	300	150	500	250	600	300	
Provisional	200	100	0	0	0	0	
<b>2. EXCESS CLAIM FEES</b>							
<b>Fee Description</b>						<b>Small Entity</b> <b>Fee (\$)</b>	<b>Fee (\$)</b>
Each claim over 20 (including Reissues)						50	25
Each independent claim over 3 (including Reissues)						200	100
Multiple dependent claims						360	180
<b>Total Claims</b>	<b>Extra Claims</b>	<b>Fee (\$)</b>	<b>Fee Paid (\$)</b>	<b>Multiple Dependent Claims</b> <b>Fee (\$)</b> <b>Fee Paid (\$)</b>			
HP = highest number of total claims paid for, if greater than 20.							
<b>Indep. Claims</b>	<b>Extra Claims</b>	<b>Fee (\$)</b>	<b>Fee Paid (\$)</b>				
HP = highest number of independent claims paid for, if greater than 3.							
<b>3. APPLICATION SIZE FEE</b>							
If the specification and drawings exceed 100 sheets of paper (excluding electronically filed sequence or computer listings under 37 CFR 1.52(e)), the application size fee due is \$250 (\$125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).							
<b>Total Sheets</b>	<b>Extra Sheets</b>	<b>Number of each additional 50 or fraction thereof</b>	<b>Fee (\$)</b>	<b>Fee Paid (\$)</b>			
_____ - 100 = _____ /50 _____ (round up to a whole number) x _____ = _____							
<b>4. OTHER FEE(S)</b>							
Non-English Specification, \$130 fee (no small entity discount)							<b>Fees Paid (\$)</b>
Other (e.g., late filing surcharge): 2251 Extension for response within first month							60.00

<b>SUBMITTED BY</b>			
Signature		Registration No. (Attorney/Agent)	28,977
Name (Print/Type)	Gerald M. Murphy, Jr.	Telephone	(703) 205-8000
		Date	January 8, 2007

01/09/2007 GFREY1 00000108 10569949

60.00 OP

01 FC:2251

Docket No.: 0230-0236PUS1  
(PATENT)

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

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In re Patent Application of:  
Takeshi IMANISHI et al.

Application No.: 10/569,949

Confirmation No.: 3122

Filed: February 28, 2006

Art Unit: N/A

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For: NOVEL ARTIFICIAL NUCLEIC ACIDS OF N-  
O BOND CROSSLINKAGE TYPE

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Examiner: Not Yet Assigned

**RESPONSE TO NOTIFICATION OF MISSING REQUIREMENTS**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

In response to the Notification of Missing Requirements dated October 6, 2006,  
Applicant respectfully submits:

- ☒ Attached is a copy of the Notification of Missing Requirements (371 Formalities Letter).
- ☒ Attached is the Executed Declaration and Power of Attorney ☒ Original ☐ Photocopy.
- ☐ The specification attached to the executed Declaration and Power of Attorney is a true copy of the specification that was filed in the U.S. Patent and Trademark Office on February 28, 2006, including any amendments thereto (if applicable) filed on even date therewith.
- ☐ The undersigned hereby declares that "Attorney Docket No. 0230-0236PUS1" on page 1 of the attached Inventors' Declaration corresponds to Appl. No.10/569,949 filed

February 28, 2006 entitled "NOVEL ARTIFICIAL NUCLEIC ACIDS OF N-O BOND  
CROSSLINKAGE TYPE."

- ☐ Attached is an English language translation of the above-identified application that was filed in a foreign language, which should be used as the copy for examination purposes.

See the attached Translator's Verification; or

The undersigned states that the English translation attached hereto is a true and correct translation of the application as originally filed in a foreign language.

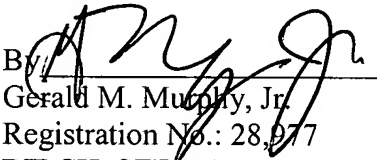
- ☐ Attached are 0 sheet(s) of drawings. Please substitute these replacement drawings for the corresponding 1 sheet(s) of drawings on file in the above-identified application.
- ☐ Attached are substitute claims commencing on a separate sheet in accordance with 37 C.F.R. § 1.75(h).
- ☐ Attached is a substitute abstract commencing on a separate sheet in accordance with 37 C.F.R. § 1.72(b).
- ☐ Attached is a substitute specification that complies with 37 C.F.R. § 1.52. The substitute specification does not contain new matter.
- ☐ Attached is a preliminary amendment.
- ☐ Applicant claims small entity status under 37 C.F.R. § 1.27.
- ☐ Attached is a Supplemental Application Data Sheet (ADS).
- ☐ Submitted concurrently herewith under separate cover for recording is an Assignment.
- ☒ Attached is a Petition for Extension of Time.

- ☒ The Government Filing Surcharge for late filing of oath and/or declaration in the amount of \$130.00 in accordance with 37 C.F.R. §§ 1.494 and 1.492 was previously paid for concurrently with the filing of the application on February 28, 2006.
- ☐ Attached hereto is the fee transmittal listing the required fees.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to our Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. § 1.16 or under § 1.17; particularly, extension of time fees.

Dated: January 8, 2007

Respectfully submitted,

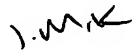
  
By \_\_\_\_\_  
Gerald M. Murphy, Jr.  
Registration No.: 28,977  
BIRCH, STEWART, KOLASCH & BIRCH, LLP  
8110 Gatehouse Road  
Suite 100 East  
P.O. Box 747  
Falls Church, Virginia 22040-0747  
(703) 205-8000  
Attorney for Applicant

Attachments:

Copy of Notification of Missing Requirements (2 pages)

Declaration (2 pages)

Petition for Extension of Time (1 page)





## UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

U.S. APPLICATION NUMBER NO. 10/569,949	FIRST NAMED APPLICANT Takeshi Imanishi	ATTY. DOCKET NO. 02300236PUS1
INTERNATIONAL APPLICATION NO. PCT/JP04/12173		
I.A. FILING DATE 08/25/2004		PRIORITY DATE 08/28/2003

02292  
BIRCH STEWART KOLASCH & BIRCH  
PO BOX 747  
FALLS CHURCH, VA 22040-0747

*DOCKETED*  
*perfect / sequence*  
*12/06/2004*

CONFIRMATION NO. 3122  
371 FORMALITIES LETTER



\*OC000000020725995\*

Date Mailed: 10/06/2006

### NOTIFICATION OF MISSING REQUIREMENTS UNDER 35 U.S.C. 371 IN THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US)

The following items have been submitted by the applicant or the IB to the United States Patent and Trademark Office as a Designated / Elected Office (37 CFR 1.495).

- Indication of Small Entity Status
- Copy of the International Application filed on 02/28/2006
- English Translation of the IA filed on 02/28/2006
- Copy of the International Search Report filed on 02/28/2006
- Preliminary Amendments filed on 02/28/2006
- Information Disclosure Statements filed on 02/28/2006
- U.S. Basic National Fees filed on 02/28/2006
- Priority Documents filed on 02/28/2006

The following items **MUST** be furnished within the period set forth below in order to complete the requirements for acceptance under 35 U.S.C. 371:

- Oath or declaration of the inventors, in compliance with 37 CFR 1.497(a) and (b), identifying the application by the International application number and international filing date.
- This application clearly fails to comply with the requirements of 37 CFR. 1.821-1.825. Applicant's attention is directed to the final rulemaking notice published at 55 FR 18230 (May 1, 1990), and 1114 OG 29 (May 15, 1990). If the effective filing date is on or after July 1, 1998, see the final rulemaking notice published at 63 FR 29620 (June 1, 1998) and 1211 OG 82 (June 23, 1998). If the effective filing date is on or after September 8, 2000, see the final rulemaking notice published in the Federal Register at 65 FR 54604 (September 8, 2000) and 1238 OG 145 (September 19, 2000). Applicant must provide an initial computer readable form (CRF) copy of the "Sequence Listing", an initial paper or compact disc copy of the "Sequence Listing", **as well as an amendment specifically directing its entry into the application.** Applicant must also provide a statement that the content of the sequence listing information recorded in computer readable form is identical to the written (on paper or compact disc) sequence listing and, where applicable, includes no new matter, as required by 37 CFR 1.821(e), 1.821(f), 1.821(g), 1.825(b), or 1.825

- (d). If applicant desires the sequence listing in the instant application to be identical with that of another application on file in the U.S. Patent and Trademark Office, such request in accordance with 37 CFR 1.821(e) may be submitted in lieu of a new CRF.
- A copy of the "Sequence Listing" in computer readable form has not been submitted as required by 37 CFR 1.821(e). If the effective filing date is on or after September 8, 2000, see the final rulemaking notice published in the Federal Register at 65 FR 54604 (September 8, 2000) and 1238 OG 145 (September 19, 2000). Applicant must provide an initial computer readable form (CRF) copy of the "Sequence Listing" and a statement that the content of the sequence listing information recorded in computer readable form is identical to the written (on paper or compact disc) sequence listing and, where applicable, includes no new matter, as required by 37 CFR 1.821(e), 1.821(f), 1.821(g), 1.825(b), or 1.825(d). If applicant desires the sequence listing in the instant application to be identical with that of another application on file in the U.S. Patent and Trademark Office, such request in accordance with 37 CFR 1.821(e) may be submitted in lieu of a new CRF.

**ALL OF THE ITEMS SET FORTH ABOVE MUST BE SUBMITTED WITHIN TWO (2) MONTHS FROM THE DATE OF THIS NOTICE OR BY 32 MONTHS FROM THE PRIORITY DATE FOR THE APPLICATION, WHICHEVER IS LATER. FAILURE TO PROPERLY RESPOND WILL RESULT IN ABANDONMENT.**

The time period set above may be extended by filing a petition and fee for extension of time under the provisions of 37 CFR 1.136(a).

Applicant is cautioned that correction of the above items may cause the specification and drawings page count to exceed 100 pages. If the specification and drawings exceed 100 pages, applicant will need to submit the required application size fee.

**For questions regarding compliance to 37 CFR 1.821-1.825 requirements, please contact:**

- **For Rules Interpretation, call (571) 272-0951**
- **For Patent Software Program Help, call Patent EBC at 1-866-217-9197 or directly at 703-305-3028 / 703-308-6845 between the hours of 6 a.m. and 12 midnight, Monday through Friday, EST.**
- **Send e-mail correspondence for Patent Software Program Help @ [ebc@uspto.gov](mailto:ebc@uspto.gov)**

Applicant is reminded that any communications to the United States Patent and Trademark Office must be mailed to the address given in the heading and include the U.S. application no. shown above (37 CFR 1.5)

*A copy of this notice **MUST** be returned with the response.*

ANITA D JOHNSON

Telephone: (703) 308-9140 EXT 226

**PART 1 - ATTORNEY/APPLICANT COPY**

U.S. APPLICATION NUMBER NO	INTERNATIONAL APPLICATION NO.	ATTY. DOCKET NO.
10/569,949	PCT/JP04/12173	02300236PUS1